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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,947

02/18/2004

Emmanuel Sedda

GRY-120US

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06/16/2006

RATNERPRESTIA

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VALLEY FORGE, PA 19482-0980

EXAMINER

CHANG, CHING

ART UNIT

PAPER NUMBER

3748

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,947

Applicant(s)

SEDDA ET AL.

Examiner

Ching Chang

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 2-3, 4/2, 5/2, 6, 7/5/2, 8, 9/2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4/1, 5/1, 7/5/1, 9/1, and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Applicants' election of the species of Figs. 4a-4b without traverse filed on 05/08/2006, claims 1, 4/1, 5/1, 7/5/1, 9/1, and 10-13 being readable thereon. Claims 2-3, 4/2, 5/2, 6, 7/5/2, 8, and 9/2 are withdrawal from consideration as being directed to the non-elected species.

Specification

1. The disclosure is objected to because of the following informalities:
 - The Applicant is required to insert a Paragraph after the title of the invention in the Specification, which claims priority under 35 USC 119 of France Application No. 03 01945 filed on 02/18/2003.Appropriate correction is required.

Drawings

2. The drawings are objected to because
 - the reference number " 301 " in Fig. 4a should be – 401 --.
 - by comparison to Fig. 4a, the stop, under the magnet, shown in Fig. 4b is non-existent, and should be deleted.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

Art Unit: 3748

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 4/1, 5/1, 7/5/1, and 9/1 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, "said stop" in claim 1 lacks antecedent basis, thus renders the claimed subject matter indefinite.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3748

5. ***Claims 1, 5/1, 7/5/1, and 9/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreuter (US Patent 4,715,332) in view of Patel (US Patent 4,533,890).***

Kreuter discloses an electromechanical valve actuator for internal combustion engines, comprising an electromagnet (66, 68) and a mobile magnetic plate (46) intended to come into contact with a part of the electromagnet, at least one stop (96) being located on the electromagnet or on the plate to limit a contact surface between the plate and the electromagnet; wherein the electromagnet comprises an E-shaped magnetic circuit, and the stop is located at an end of one of three essentially parallel branches that form the E-shaped magnetic circuit.

Kreuter discloses the invention as recited above, however, fails to disclose the electromagnet comprising a magnet in the magnetic circuit

The patent to Patel on the other hand, teaches that it is conventional in the magnet actuator art, to utilize magnets (42, 44) in a magnetic circuit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the magnets in the magnetic circuit as taught by Patel in the Kreuter device, since the use thereof would provide an improved engine electromechanical valve actuator, which has an enhanced magnetic flux density.

6. ***Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kreuter (US Patent 4,715,332) in view of Patel (US Patent 4,533,890).***

Kreuter discloses an electromechanical valve actuator for internal combustion engines, comprising an electromagnet (66, 68) and a mobile magnetic plate (46)

Art Unit: 3748

intended to come into contact with a part of the electromagnet, at least one stop (96) being located on a surface of the electromagnet which is closest to the plate or on the plate, wherein a contact surface area of the plate is smaller than a total surface area of the plate to limit a contact surface between the plate and the electromagnet,

Kreuter discloses the invention as recited above, however, fails to disclose the electromagnet comprising a magnet in the magnetic circuit

The patent to Patel on the other hand, teaches that it is conventional in the magnet actuator art, to utilize magnets (42, 44) in a magnetic circuit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the magnets in the magnetic circuit as taught by Patel in the Kreuter device, since the use thereof would provide an improved engine electromechanical valve actuator, which has an enhanced magnetic flux density.

7. Claims 1, 4/1, 5/1, 7/5/1, and 9/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wuebbecke (EP '806) in view of Patel (US Patent 4,533,890).

Wuebbecke discloses an electromechanical valve actuator for internal combustion engines, comprising an electromagnet (1, 2.1) and a mobile magnetic plate (3) intended to come into contact with a part of the electromagnet, at least one stop (4, 2.2) being located on the electromagnet or on the plate to limit a contact surface between the plate and the electromagnet; wherein the electromagnet comprises an E-shaped magnetic circuit, and the stop is located at an end of one of three essentially parallel branches that form the E-shaped magnetic circuit; wherein the at least one stop includes a plurality of stops and each of the plurality of stops is located on one of the

Art Unit: 3748

electromagnet and the plate, the stops between arranged symmetrically in relation to an axis of translation of the plate.

Wuebbeke discloses the invention as recited above, however, fails to disclose the electromagnet comprising a magnet in the magnetic circuit

The patent to Patel on the other hand, teaches that it is conventional in the magnet actuator art, to utilize magnets (42, 44) in a magnetic circuit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the magnets in the magnetic circuit as taught by Patel in the Wuebbeke device, since the use thereof would provide an improved engine electromechanical valve actuator, which has an enhanced magnetic flux density

8. ***Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wuebbeke (EP '806) in view of Patel (US Patent 4,533,890).***

Wuebbeke discloses an electromechanical valve actuator for internal combustion engines, comprising an electromagnet (1, 2.1) and a mobile magnetic plate (3) intended to come into contact with a part of the electromagnet, at least one stop (4, 2.2) being located on a surface of the electromagnet which is closest to the plate or on the plate, wherein a contact surface area of the plate is smaller than a total surface area of the plate to limit a contact surface between the plate and the electromagnet.

Wuebbeke discloses the invention as recited above, however, fails to disclose the electromagnet comprising a magnet in the magnetic circuit.

The patent to Patel on the other hand, teaches that it is conventional in the magnet actuator art, to utilize magnets (42, 44) in a magnetic circuit.

Art Unit: 3748

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the magnets in the magnetic circuit as taught by Patel in the Wuebbeke device, since the use thereof would provide an improved engine electromechanical valve actuator, which has an enhanced magnetic flux density.

9. ***Claims 10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreuter or Wuebbeke in view of Patel (as applied to claims 1, and 11 above), and further in view of design choice.***

The modified Kreuter or Wuebbeke device disclosed the claimed invention except for the material of the stop.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use either a magnetic or a elastometric material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

In re Leshin, 125 USPQ 416.

Response to Arguments

10. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

Art Unit: 3748

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner


Ching Chang